

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1-11. (Canceled).
12. (Original) A method for treating liquid waste comprising:
 - (a) providing an AC plasma torch;
 - (b) providing liquid waste;
 - (c) atomizing the liquid waste;
 - (d) generating a plasma flame with the AC plasma torch; and
 - (e) introducing the atomized liquid waste into or above the flame.
13. (Original) The method for treating liquid waste of claim 12 wherein the liquid waste comprises hazardous solvent waste.
14. (Currently Amended) The method for treating liquid waste of claim 13 further comprising:
 - (a) gasifying the atomized liquid waste ~~dissociating the organic molecules of the gasified liquid waste into elemental components~~;
 - (b) dissociating organic molecules of the gasified atomized liquid waste ~~into elemental components~~ gasifying the atomized liquid waste; and
 - (c) reforming the elemental components as carbon monoxide gas and hydrogen gas.
15. (Currently Amended) The method for treating liquid waste of claim 14 wherein the step act of dissociating the organic molecules destroys the hazardous constituency of the organic portion of the liquid waste and is accomplished through pyrolysis of the liquid waste.

16. (Original) The method for treating liquid waste of claim 15 further comprising:

- (a) providing oxygen; and
- (b) combining the oxygen with the elemental components to form carbon dioxide gas.

17. (Original) The method for treating liquid waste of claim 15 further comprising:

- (a) cooling the carbon monoxide gas and hydrogen gas from a temperature of between about 1250°C and 1350°C to between about 40°C and 80°C;
- (b) removing carbon particulate from the carbon monoxide gas and hydrogen gas; and
- (c) separating any acid gases from the carbon monoxide gas and hydrogen gas.

18. (Currently Amended) A method for treating hazardous solvent waste comprising:

- (a) providing a first source of hazardous liquid solvent waste;
- (b) providing a first nozzle;
- (c) providing an AC plasma torch;
- (d) atomizing a portion of the first source of hazardous liquid solvent waste;
- (e) generating a flame from the torch; and
- (ef) injecting the atomized portion of the first source of hazardous liquid solvent waste from the ~~first source~~ through the first nozzle directly into the flame.

19. (Currently Amended) The method for treating hazardous solvent waste of claim 18 further comprising:

- (a) providing a second source of hazardous liquid solvent waste;
- (b) providing a second nozzle; and
- (c) atomizing a portion of the second source of hazardous liquid solvent waste; and
- (d) injecting the atomized portion of the second source of hazardous liquid solvent the solvent waste from the second source through the second nozzle directly into the flame.

20. (Currently Amended) The method for treating hazardous solvent waste of claim 19 wherein the solvent waste from the first source and the solvent waste from the second source are injected through the respective nozzles in an alternating or sequential manner.

21. (New) The method for treating liquid waste of claim 12 wherein the flame projects upwardly from the AC plasma torch.

22. (New) The method for treating liquid waste of claim 12 wherein the waste is not diluted or mixed with an oxidizing agent before performing the act of introducing the waste into or above the flame.

23. (New) The method for treating liquid waste of claim 14 wherein the act of dissociating the organic molecules of the gasified liquid waste into elemental components is not performed through combustion.

24. (New) The method for treating liquid waste of claim 14 wherein the act of dissociating the organic molecules of the gasified liquid waste into elemental components is performed in the absence of a substantial amount of oxygen.

25. (New) The method for treating liquid waste of claim 14 wherein the act of dissociating the organic molecules of the gasified atomized liquid waste into elemental components is performed in part by combustion and in part by pyrolysis.
26. (New) The method for treating liquid waste of claim 25, wherein the act of dissociating the organic molecules of the gasified atomized liquid waste into elemental components by combustion is performed by introducing the gasified atomized liquid waste with oxygen into the plasma flame.
27. (New) The method for treating liquid waste of claim 14 wherein the acts are performed in the absence of coke.